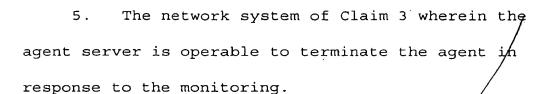WHAT IS CLAIMED IS:

1. A network system comprising:

a service;

an agent operable to use the service on behalf of

5 a principal; and

an agent server operable to mediate the use of the

service by the agent.

2. The network system of Claim 1 further

10 comprising a computational resource which can be

consumed by the agent.

3. The network system of Claim 2 wherein the

agent server is operable to monitor the consumption of

15 the computational resource by the agent.

4. The network system of Claim 3 wherein the

agent server is operable to charge the principal for

the consumption of the computational resource.

20

5.   The network system of Claim 3 wherein the agent server is operable to terminate the agent in response to the monitoring.

5   6.   The network system of Claim 2 further comprising a computational permission associated with the computational resource and the agent, the computational permission specifying a predetermined amount of the computational resource which the agent is
10   allowed to consume.

7.   The network system of Claim 2 further comprising a computational permission associated with the computational resource and the principal, the
15   computational permission specifying a predetermined amount of the computational resource which is allowed to be consumed on behalf of the principal.

8.   The network system of Claim 2 wherein the
20   computational resource can be processing time for the agent or elapsed time for the agent.

9.   The network system of Claim 1 further comprising a service resource associated with the service and which can be consumed by the agent when the agent uses the service.

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10.   The network system of Claim 9 further comprising a service wrapper associated with the service, the service wrapper operable to monitor the consumption of the service resource by the agent.

10

11.   The network system of Claim 10 wherein the service wrapper is operable to terminate the agent in response to the monitoring.
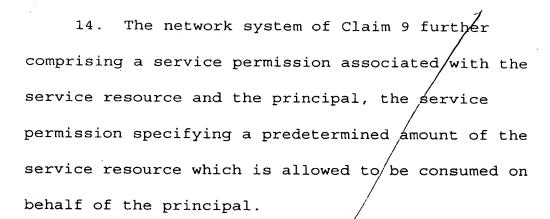
15   12.   The network system of Claim 9 wherein the agent server is operable to charge the principal for the consumption of the service resource.

13.   The network system of Claim 9 further
20 comprising a service permission associated with the service resource and the agent, the service permission specifying a predetermined amount of the service resource which the agent is allowed to consume.

14.   The network system of Claim 9 further comprising a service permission associated with the service resource and the principal, the service

5   permission specifying a predetermined amount of the service resource which is allowed to be consumed on behalf of the principal.

15.   The network system of Claim 9 wherein the

10   service resource comprises elapsed time for a telephone call.

16.   The network system of Claim 9 wherein the service resource comprises cost for a telephone call.

15

17.   The network system of Claim 1 further comprising a service wrapper associated with the service, the service wrapper operable to translate between a first instruction set and a second

20   instruction set.

18.   The network system of Claim 1 further

comprising a user interface coupled to the agent

server, the user interface operable to allow a user to

create, modify, or delete an agent template from which

5   the agent is created.

19.   The network system of Claim 1 further

comprising a user interface coupled to the agent

server, the user interface operable to allow a user to

10   create, modify, or delete the agent.

20.   The network system of Claim 19 wherein the

user interface comprises a graphical user interface.

15   21.   The network system of Claim 20 wherein the
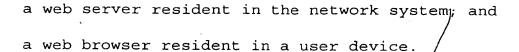
graphical user interface comprises:

a web server resident in the network system; and

a web browser resident in a user device.

20   22.   The network system of Claim 19 wherein the

user interface comprises a voice user interface.

23. The network system of Claim 22 wherein the
voice user interface comprises a speech recognition
application.

5   24. The network system of Claim 22 wherein the
voice user interface comprises a speech synthesis
application.

25. The network system of Claim 22 wherein the
10   voice user interface comprises a speech playback
device.

26. The network system of Claim 1 wherein the
service comprises a user interface service operable to
15   provide a user interface by which the agent can
interact with a user.

27. The network system of Claim 26 wherein the
user interface comprises a graphical user interface.

20

28. The network system of Claim 27 wherein the
graphical user interface comprises:

a web server resident in the network system; and

a web browser resident in a user device.

29.   The network system of Claim 27 wherein the

5   user interface comprises a voice user interface.

30.   The network system of Claim 29 wherein the

voice user interface comprises a speech recognition

application.

10

31.   The network system of Claim 29 wherein the

voice user interface comprises a speech synthesis

application.

15   32.   The network system of Claim 29 wherein the

voice user interface comprises a speech playback

device.

33.   A network system comprising:

20   a user interface operable to allow a user to

interact with the network system; and

an agent server coupled to the user interface; the

agent server operable to manage the operation of a

programmable functionality component of the network

system, the agent server in conjunction with the user

interface operable to create, modify, or delete an

agent in response to interaction by the user.

5

34.   The network system of Claim 33 wherein the
user interface comprises a graphical user interface.

35.   The network system of Claim 34 wherein the
10   graphical user interface comprises a web browser

application.

36.   The network system of Claim 33 wherein the
user interface comprises a voice user interface.

15

37.   The network system of Claim 36 wherein the
voice user interface comprises a speech recognition

application.

20   38.   The network system of Claim 36 wherein the
voice user interface comprises a speech synthesis

application.

43. The network system of Claim 41 further comprising a service resource associated with the service, the service resource being consumed when the agent utilizes the service.

5

44. The network system of Claim 43 wherein the service wrapper is operable to monitor the amount of service resource consumed by the agent when the agent utilizes the service.

10

45. A method comprising:

admitting a user to a network system wherein at least one agent is operable to utilize a service to perform a task for the user; and

15　　allowing the user to create, modify, or delete the agent within the network system.

46. The method of Claim 45 further comprising accepting an agent command from the user.

20

47.   The method of Claim 46 wherein the agent,
command is one of a create agent command, an edit agent
command, and a delete agent command.

5   48.   The method of Claim 45 further comprising
suspending execution of the agent.

         49.   The method of Claim 45 further comprising
accepting a template command from the user.

10

         50.   The method of Claim 49 further comprising
allowing the user to create, modify, or delete an agent
template within the network system.

15   51.   The method of Claim 45 further comprising
admitting the user to an agent area of a user
interface.

         52.   A network system comprising:

20   an agent server operable to manage the operation
of a programmable functionality component of the
network system;

a service;

an agent operable to utilize the service; and

a service wrapper associated with the service, the service wrapper operable to cooperate with the agent

5   server to mediate interaction between the service and the agent.

53.   The network system of Claim 52 further comprising a service resource associated with the

10   service, the service resource being consumed when the agent utilizes the service.

54.   The network system of Claim 53 wherein the service wrapper comprises a monitor, the monitor

15   operable to monitor the amount of the service resource consumed by the agent when the agent utilizes the service.

55.   The network system of Claim 52 wherein the

20   service wrapper comprises a converter, the converter operable to convert between a first computer language

used by the agent and a second computer language used
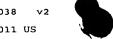by the service.

56. The network system of Claim 55 wherein the
5   converter comprises an agent server to service
converter for converting from the first computer
language to the second computer language.

57. The network system of Claim 55 wherein the
10   converter comprises a service to agent server converter
for converting from the second computer language to the
first computer language.

58. The network system of Claim 52 further
15   comprising a user interface operable to allow a user to
interact with the network system in order to create the
agent.

59. The network system of Claim 58 wherein the
20   user interface comprises a graphical user interface.

60.   The network system of Claim 59 wherein the graphical user interface comprises a web browser application.

5   61.   The network system of Claim 58 wherein the user interface comprises a voice user interface.

62.   The network system of Claim 61 wherein the voice user interface comprises a speech recognition

10   application.

63.   The network system of Claim 61 wherein the voice user interface comprises a speech synthesis application.

15

64.   The network system of Claim 61 wherein the voice user interface comprises a speech playback device.

20   65.   The network system of Claim 52 further comprising a computational resource which can be consumed by the agent.

66. The network system of Claim 65 wherein the

agent server is operable to monitor the amount of the

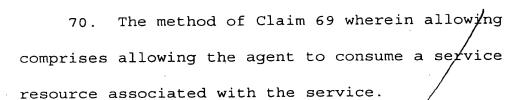computational resource consumed by the agent.

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67. The network system of Claim 52 further

comprising an agent object associated with the agent

and resident in the agent server, the agent object

comprising data and instructions executable within the

10 agent server.

68. The network system of Claim 52 further

comprising an agent object associated with the agent

and resident in the agent server, the agent object

15 comprising a permission for the agent.

69. A method comprising:

allowing an agent to utilize a service; and

mediating interaction between the service and the

20 agent.

70.   The method of Claim 69 wherein allowing comprises allowing the agent to consume a service resource associated with the service.

5   71.   The method of Claim 69 wherein mediating comprises monitoring the amount of a service resource consumed by the agent.

72.   The method of Claim 69 wherein mediating

10   comprises:

identifying a service permission required in order for the agent to consume a service resource associated with the service; and

determining whether the agent holds the required

15   service permission.

73.   The method of Claim 69 wherein mediating comprises:

receiving an instruction which requires that the

20   agent consume a service resource associated with the service when the agent utilizes the service;

identifying an amount of the service resource

which would be consumed if the instruction is executed;

identifying an amount of the service resource

allotted to the agent; and

5   determining whether the amount which is allotted

is greater than or equal to the amount which would be

consumed.

74.   The method of Claim 73 wherein mediating

10   comprises:

executing the instruction if the amount which is

allotted is greater than or equal to the amount which

would be consumed; and

subtracting the amount which would be consumed

15   from the amount which is allotted.

75.   The method of Claim 69 further comprising

converting between a first computer language used by an

agent and a second computer language used by the

20   service.

76.   The method of Claim 69 further comprising:

allowing an agent to consume a computational
resource; and

monitoring the amount of the computational
resource consumed by the agent.

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